

MODEL-BASED INCIDENT DETECTION SYSTEM  
WITH MOTION CLASSIFICATION

ABSTRACT

Surveillance apparatus and methods effective for detecting incidents are based upon improved image processing techniques applied to infrared and visible  
5 light spectrum images in a time sequence. A reference image is generated by removing motion objects from an image of a region of interest. The reference image is compared to an image to be analyzed to detect motion. Detected motion is analyzed and classified as motion  
10 objects. The motion objects are then compared to a motion model, which classifies the objects as being anticipated or unanticipated.